Program Overview

8:45 **Registration and Coffee** - *Atrium*

9:30 **Morning program** - *Marble Hall*

Welcome
Sponsor pitches
±9:50 Challenge pitches
±10:25 Power Poster Presentations

11:00 **Coffee Break + Poster Session 1 + Sponsor Booths** - *Atrium*
Authors of odd-numbered posters, please be present at your poster during this time

11:45 **Parallel Session 1: Oral presentations**

MRI/MRS methods - *Gorilla 1*
Recon Magic - *Okapi 2*

12:45 **Lunch + Sponsor Booths** - *Atrium* Sponsored by MR Coils PHILIPS

13:45 **Parallel Session 2: Workshops + Annual members meeting**

ISMRM Benelux Annual Members Meeting - *Gorilla 2*

Workshops
- ***GE Healthcare*** - *Marble hall*
- ***Scannexus*** - *Gorilla 1*
  'Breast in brain – somatosensory representation of the breast as measured with 7T fMRI'
- ***Bruker*** - *Okapi 2*
  'Beyond just MRI'

14:15 **Parallel Session 3: Oral presentations**

Brain Teasers - *Gorilla 1*
Transmit & Receive - *Okapi 2*

15:45 **Coffee Break + Poster Session 2 + Sponsor Booths** - *Atrium*
Authors of even-numbered posters, please be present at your poster during this time

16:30 **Parallel Session 4: Oral presentations**

Spins in Motion - *Gorilla 1*
Bench to bedside - *Okapi 2*

18:00 **Award Ceremony** - *Marble Hall*

18:20 **Reception** - *Atrium*

19:00 **Walking Dinner at Radisson Blu Astrid Hotel** (Registration Required)

Candidates Challenges

Moderators

Lucas Lindeboom
Maastricht University Medical Center

Firat Kara
University of Antwerp

Abroad Internship Challenge

- Gabriel Ramos Llordén

  Unprecedented acceleration of quantitative dMRI with joint k-q space reconstruction: when the 'blessings' of high dimensionality overcome the 'curse'
  imec-Vision Lab, Department of Physics, University of Antwerp, Antwerp, BE

- Nikos Priovoulos

  Improving quantification of T1 by T2* iron measurements
  School for Mental Healthy and Neuroscience, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, NL

Out of the BOX Challenge

- Wyger Brink

  Imaging thermoregulation through MRI: Safety concern or measurement tool?
  Department of Radiology, C.J. Gorter Center for High Field MRI, Leiden University Medical Center, Leiden, NL

- Arjan Hendriks

  Opportunities of biofeedback in the field of cardiac MRI
  Department of Radiology, University Medical Center Utrecht, Utrecht, NL

- Sophie Schmid

  Imaging oxygen extraction fraction at tissue level
  Department of Radiology, C.J. Gorter Center for High Field MRI, Leiden University Medical Center, Leiden, NL

Power Posters

Moderators

Lucas Lindeboom
Maastricht University Medical Center

Firat Kara
University of Antwerp

PP-001 Erwin Krikken

Amide chemical exchange saturation transfer at 7T: A possible biomarker for detecting early response to neoadjuvant chemotherapy in breast cancer patients

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

Neoadjuvant chemotherapy (NAC) has an important role in the treatment of breast cancer and the need for early detection of treatment response is high. Therefore we investigated the feasibility of using APT CEST at 7T as a biomarker for this purpose. Ten lesions were included and APT signal before and after the first cycle of NAC were correlated to the pathological response. Significant differences were found in APT signal corresponding with the pathological response. These results suggest that APT CEST may be used to predict the response to NAC treatment in an early stage.

PP-002 Lukas Gottwald

Pseudo spiral sampling and Compressed Sensing reconstruction provides high acceleration of intracranial 4D flow MRI at 7T

Department of Radiology and Nuclear Medicine, Academic Medical Center, Amsterdam, NL

Long scan times limit the application of 4D flow in clinical practice. Even at 7T, considerable scan times are needed for modest spatiotemporal resolutions. This work demonstrates the advantage of Compressed Sensing acceleration of 4D flow MRI at 7T with a novel undersampling technique. Healthy subjects (n=5) were scanned using standard SENSE and a proposed undersampling technique with Compressed Sensing reconstruction. Flow analysis showed minor differences, and image quality improved for Compressed Sensing reconstructions with maintained resolution and reduced scan time. The method enables further increases of acceleration and spatiotemporal resolution, adding more physiological details beyond current resolution limitations.

PP-003 Thomas O'Reilly

Low-loss high-permittivity blocks improves the SNR of surface coils at 3 Tesla

C.J. Gorter Center, Dept. Radiologie, Leiden University Medical Center, Leiden, NL

The performance of surface coils for proton imaging at 3 Tesla can be improved by placing low-loss high-permittivity blocks at the centre of the surface coil. The signal-to-noise ratio in a human calf of a coil with integrated dielectric block is 25% higher close to the coil and performs comparably well compared to a standard surface coil at depths exceeding 6 cm providing a simple and effective way of improving surface coil performance.

Power Posters

Moderators

Lucas Lindeboom
Maastricht University Medical Center

Firat Kara
University of Antwerp

PP-004 Lore Peeters

Functional MRI reveals resting state network alterations upon DREADD-induced silencing of the right dorsomedial prefrontal cortex in mice.

Bio-Imaging Lab, University of Antwerp, Antwerp, BE

Combining chemogenetics with non-invasive functional MRI (fMRI) allows establishing a link between the activity of selected populations of neurons with large-scale network activity. Here, we show that Kappa Opioid Receptor (KOR) DREADD-induced decreases in neural activity result in network alterations that can be picked up by pharmacological and resting state fMRI. In particular, inhibition of the right dorsomedial prefrontal cortex (dmPFC), a core region of the attention network in rodents, induces functional connectivity changes between other regions of the attentional network and between regions of distinct sensory networks (e.g. the visual network).

PP-005 Kirsten Koolstra

A Matrix Completion-Based Reconstruction of in Vivo Eye Images from Undersampled Cartesian 7T MRF Data

C.J. Gorter Center for High Field MRI, Leiden University Medical Center, Leiden, NL

Eye motion is the main challenge in ocular MRF scans. To achieve good MRF image quality and to improve patient comfort on the other side, scan times need to be reduced. In this single-channel coil approach with Cartesian sampling, high undersampling can be supported by using the appropriate reconstruction approach. In this work, a matrix completion-based reconstruction was adopted. Resulting parameter maps are compared to maps obtained after a compressed sensing reconstruction, showing that for matrix completion even much greater undersampling factors result in more accurate parameter maps.

PP-006 Marjolein Bulk

Quantitative MRI and laser ablation-inductively coupled plasma-mass spectrometry imaging of iron in post-mortem frontal cortex of Alzheimer patients

Department of Radiology and Human Genetics, Leiden University Medical Center, Leiden, NL Percuros BV, Leiden, NL

Previous imaging studies reported iron-induced T2* or phase contrast changes in the cortex of post-mortem brain tissue of patients with Alzheimer's disease, but comparison with a gold standard is lacking. This study used laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) as a gold standard for iron in post-mortem brain tissue of controls and AD patients and investigated the correlation between LA-ICP-MS, quantitative MRI (R2*, phase, and QSM) and histology. R2* and QSM showed the highest correlation with iron content; the correlation of phase with iron was weaker, probably due to its high orientation dependence.

Power Posters

Moderators

Lucas Lindeboom
Maastricht University Medical Center

Firat Kara
University of Antwerp

PP-007 Yvonne Bruls

Carnitine supplementation improves skeletal muscle acetylcarnitine formation and metabolic flexibility

Department of Radiology and Nuclear Medicine NUTRIM School for Nutrition and Translational Research in Metabolism, Maastricht University Medical Center, Maastricht, NL

The formation of acetylcarnitine may serve as a mitochondrial rescue mechanism to prevent the development of metabolic inflexibility and type 2 diabetes. We here used a novel magnetic resonance spectroscopy protocol, using long echo times, to determine acetylcarnitine concentrations in skeletal muscle in vivo. Carnitine supplementation enhanced the increase in acetylcarnitine concentration in resting muscle over the day as well as the capacity to form acetylcarnitine with exercise. Furthermore, carnitine supplementation completely restored metabolic flexibility suggesting that carnitine supplementation may be an interesting aid in improving disturbed metabolism in subjects prone to develop type 2 diabetes mellitus.

MRI/MRS methods

Moderators

Ot Bakermans
Academic Medical Center, Amsterdam

Marnix Maas
Radboud university medical center, Nijmegen

O-001 - Sourav Bhaduri

Reduction of Acquisition time by Partition of the sIgnal Decay in Spectroscopic Imaging (RAPID-SI) technique: Preliminary In-vivo results and comparison with CSI

Department of Radiology and nuclear medicine, University of Ghent, Gent, BE

O-002 - Lisan Morsinkhof

Maximizing MRSI data quality by combining innovative acquisition, reconstruction and data processing techniques at 7T

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

O-003 - Gerhard Drenthen

Myelin-Water Quantification: Orthogonal Matching Pursuit versus Non-Negative Least Squares

Department of Radiology & Nuclear Medicine, Maastricht University Medical Center, Maastricht, NL; School for Mental Healthy and Neuroscience, Maastricht University Medical Center, Maastricht, NL

O-004 - Pandichelvam Veeraiah

Reproducibility of the measurement of hepatic lipid composition with 1H MRS at 3T

D epartments of Radiology and Human Biology and Human Movement Sciences, NUTRIM School for Nutrition and Translational Research in Metabolism, Maastricht University Medical Center, Maastricht, NL

O-005 - Ernst Kooreman

Repeatability of Quantitative Imaging on the MR-Linac for Treatment Response Monitoring

Department of Radiation Oncology, The Netherlands Cancer Institute, Amsterdam, NL

Recon Magic

Moderators

Alessandro Sbrizzi
University Medical Center, Utrecht

Dirk Poot
Erasmus Medical Center, Rotterdam

O-006 - Chaoping Zhang

A new pattern for Autocalibrated Parallel Imaging Reconstruction for GRASE: APIR4GRASE

Biomedical Imaging Group/Departments of Medical Informatics and Radiology, Erasmus Medical Center, Rotterdam, NL

O-007 - Mateusz Florkow

The influence of different MR contrasts in multi-channel convolutional neural networks on pseudo-CT generation for orthopedic purposes

Image Science Institute, University Medical Center Utrecht, Utrecht, NL

O-008 - Stephan Heunis

Dynamic T2* and S0 mapping towards real-time multi-echo fMRI denoising

Department of Electrical Engineering, Eindhoven University of Technology, Eindhoven, NL

O-009 - Niek Huttinga

A dynamic MR-signal model to capture 3D motion-fields at ultra-high frame-rate

Centre for image sciences, University Medical Centre Utrecht, Utrecht, NL; Utrecht University, Utrecht, NL

O-010 - Reijer Leijsen

Three-Dimensional CSI-Electrical Properties Tomography

C.J. Gorter Center, Leiden University Medical Center, Leiden, NL

Sponsor Workshops

13:45

This year, some of our Gold and Silver Sponsors are offering informative workshops on various topics taking place during a short parallel session after lunch. The annual members meeting of our chapter, to which all participants of the meeting are invited, will also be held at this time.

ISMRM Benelux Board- ***Annual Members Meeting*** - Gorilla 2

In parallel to the sponsored workshops, the board of the ISMRM Benelux will host the annual members meeting of the ISMRM Benelux Chapter. During this year's meeting we will again discuss the current status of the Chapter. The meeting is open to everyone and especially to those willing to participate in future activities of the chapter! More specifically, the agenda points comprise an evaluation of the present and previous annual meeting, a financial report and a discussion on future activities. You are welcome to present your own ideas to bring our chapter into fruition.

GE Healthcare Sponsored Workshop - Marble hall

Scannexus Sponsored Workshop - Gorilla 1

'Breast in brain – somatosensory representation of the breast as measured with 7T fMRI'
Recent developments in reconstructive surgery have resulted in a nerve-preserving post-mastectomy breast reconstruction, with the intended goal of improved sensory recovery of the breast over time. Can we measure the extent of this recovery by looking at the brain? With use of 7T functional MRI we mapped the cortical representation of the male and the female breast. We investigated if we could cortically map four quadrants of the breast as well as the nipple by employing several analysis techniques. The approach and results of this study will enable future studies to objectively quantify somatosensory recovery after reconstructive surgical procedures.

Bruker Sponsored Workshop - Okapi 2
'Beyond just MRI'

Brain Teasers

Moderators

Elisabeth Jonckers
University of Antwerp

Anouk Schrantee
Academical Medical Center, Amsterdam

O-011 - Emma Christiaen

Functional connectivity changes during epileptogenesis: a longitudinal rs-fMRI study

MEDISIP, Department of Electronics and Information Systems, Ghent University - MEC, Ghent, BE

O-012 - Ilse Kant

The association between brain volumes and physical frailty in older individuals

Department of Radiology, UMC Utrecht, Utrecht, NL; Intensive Care, UMC Utrecht, Utrecht, NL

O-013 - Alexandra de Sitter

Patient privacy in data sharing: the impact of removing facial features from MR images on automated skull stripping

Radiology and Nuclear Medicine, VU University Medical Center, Amsterdam, NL

O-014 - Lisanne Canjels

Assessing the functional connectivity of hippocampal subfields in healthy controls and TLE: a resting state fMRI study at 7T

Department of Radiology and Nuclear Medicine, Maastricht University Medical Center, Maastricht, NL; School for Mental Health and Neuroscience, Maastricht University, Maastricht, NL

O-015 - Stephan Missault

Hypersynchronicity in the default mode-like network and altered NMDA receptor function in a maternal immune activation model

Experimental Laboratory of Translational Neurosciences, University of Antwerp, Wilrijk, BE; Bio-Imaging Lab, University of Antwerp, Wilrijk, BE

O-016 - Kevin van Veenhuijzen

31P MRSI of asymptomatic C9orf72 carriers and non-carriers at 7 Tesla

Department of Neurology, Brain Center Rudolf Magnus, University Medical Centre Utrecht, Utrecht, NL

O-017 - Arjen Lindenholz

Vascular risk factors and intracranial atherosclerosis at 7T vessel wall MRI in Caucasian ischemic stroke and TIA patients

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

Transmit & Receive

Moderators

Mark van Uden
Radboud university medical center, Nijmegen

Wyger Brink
Leiden University Medical Center

RF Engineering

O-018 - Stefan Zijlema

Development of a radiolucent 64-channel on-body receive array to enhance image quality of the MR-linac

Department of Radiotherapy, UMC Utrecht, Utrecht, NL

O-019 - Ria Forner

First experiences with a phosphorus 30 channel receiver head array at 7T

MR Coils, Zaltbommel, NL

O-020 - Erik Huijing

Concentric PET shields and wide-bore 1.5T MR birdcage for optimal MR and PET signal

Imaging Division, University Medical Center Utrecht, Utrecht, NL

Acquisition Strategies

O-021 - Maaike van den Boomen

Simultaneous Multi-Slice Gradient Echo Spin Echo EPI (SMS-GESE-EPI) enables simultaneous cardiac T2 and T2* imaging and mapping across six slices within a single heart beat

Department of Radiology, University of Groningen, University Medical Center Groningen, Groningen, NL; A.A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, MA, USA

O-022 - Arjan Hendriks

Shot selective 2D CAIPIRINHA for 3D EPI scans: combination with high density receive arrays and application to sub-millimeter functional and structural MRI at 7T

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

O-023 - Guruprasad Krishnamoorthy

Free-breathing volumetric Fat-Water separation using 3D Golden-Angle Kooshball trajectory with anisotropic field-of-views - A feasibility study

MR Clinical Science, Philips Healthcare, Best, NL; Department of Biomedical Engineering, Eindhoven University of Technology, Eindhoven, NL

O-024 - Eva Peper

30 times accelerated 4D flow MRI in the carotids using a Pseudo Spiral Cartesian acquisition and a Total Variation constrained Compressed Sensing reconstruction

Department of Radiology and Nuclear Medicine, Academic Medical Center, Amsterdam, NL

Spins in Motion

Moderators

Alberto de Luca
University Medical Center Utrecht

Sophie Schmid
Leiden University Medical Center

O-025 - Ayodeji Adams

Repeatability of measuring pulsatile brain tissue motion and volumetric strain with retrospectively-gated DENSE at 7T

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

O-026 - Koen Baas

Comparing pCASL CBF measurements between 3D-GraSE and 2D-EPI on 1.5T and 3T systems

BIU MR, Philips, Best, Netherlands; VUmc, Amsterdam, NL

O-027 - Kemal Sümser

Intravoxel Incoherent Motion Imaging of Thermoregulation in Skeletal Muscle

Radiation Oncology, Erasmus Medical Center, Rotterdam, NL

O-028 - Isabell Bones

Introducing a fat-image guided registration technique for image-based retrospective motion compensation for free-breathing background suppressed renal pCASL

Center for Image Sciences, University Medical Center Utrecht, Utrecht, NL

O-029 - Qinwei Zhang

3D Diffusion Imaging with SPiral Encoded Navigators from Stimulated Echoes (3D DISPENSE)

Department of Radiology, Academic Medical Center, Amsterdam, NL

O-030 - Leonie Petitclerc

Investigation into water transport mechanisms in the brain using a combination of T2 measurements and crusher gradients with ASL

C.J. Gorter Center for High Field MRI, Radiology, Leiden University Medical Center, Leiden, NL

O-031 - Jolanda Spijkerman

PC-MRI measurements of net CSF flow through the cerebral aqueduct strongly depend on respiration

Department of Radiology, University Medical Center Utrecht, Utrecht, NL

Bench to Bedside

Moderators

Mangala Srinivas
Radboud university medical center, Nijmegen

Anita Harteveld
University Medical Center Utrecht

O-032 - Laura Vergoossen

Are prediabetes and type 2 diabetes associated with white matter connectivity alterations? The Maastricht Study

Department of Radiology and Nuclear Medicine, Maastricht University Medical Center, Maastricht, NL

O-033- Antonia Kaiser

Effects of physical exercise on hippocampal volume and vasculature in young adults

Department of Radiology and Nuclear Medicine, Academic Medical Center, University of Amsterdam, Amsterdam, NL;Swammerdam Institute for Life Sciences, Center for Neurosciences, University of Amsterdam, Amsterdam, NL; Amsterdam Brain and Cognition, University of Amsterdam, Amsterdam,, NL

O-034 - Michel Sinke

Dynamic Structural-Functional Relationship between Left and Right Somatosensory Cortex in Rats across the Lifespan

Biomedical MR Imaging and Spectroscopy Group, Center for Image Sciences, University Medical Center Utrecht / Utrecht University, Utrecht,NL

O-035 - Tom Perik

Image fusion of LF-MRI and MRA for endovascular interventions

Faculty of Science and Technology, University of Twente, Enschede, NL; Department of Vascular Surgery, Medisch Spectrum Twente, Enschede, NL

O-036 - Jules Nelissen

Elastography, T2-mapping, and Dixon MRI of the gluteus maximus muscle in spinal cord injured and able-bodied subjects

Biomedical Engineering, Eindhoven University of Technology, Eindhoven, NL; Biomedical Engineering and Physics, Academic Medical Center, Amsterdam, NL;Radiology and Nuclear Medicine, Academic Medical Center, Amsterdam, NL

O-037 - Jordy van Zandwijk

Investigating the potential of low concentrations of iron-oxide contrast agents at low magnetic field strengths for the purpose of MR guided interventions

Magnetic Detection & Imaging, University of Twente, Enschede, NL; Vasculary Surgery, Medisch Spectrum Twente, Enschede, NL

O-038 - Jurgen Peerlings

Performing clinical 18FDG-PET/MR imaging of the mediastinum using a dedicated, patient-friendly protocol

Department of Radiation Oncology (MAASTRO clinic), GROW- School for Oncology and Developmental Biology, Maastricht University Medical Centre+, Maastricht, NL; Department of Radiology and Nuclear medicine, GROW - School for Oncology and Developmental Biology, Maastricht University Medical Centre+, Maastricht, NL

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p002	Tourais	3D Golden Angle Stack-of-Stars with Anisotropic Field-of-View
p003	Poot	Can scans with different TR be combined to improve UTE T2* measurements?
p004	Christobal-Huerta	Compressed Sensing 3D-GRASE for faster T2-mapping
Body		
p005	Ferrer	3D Relaxation and INcoherent-motion Prepared Acquisition (3D-RINPA) for MR lymphography of the thoracic duct
p006	Ruytenberg	Development of a dedicated laryngeal surface coil for improved high resolution imaging in laryngeal cancer
p007	Pullens	Across vendor comparison of multi-echo GRE R2* measurements in the kidney and a tissue-mimicking phantom
p008	van Schelt	Respiratory binning showdown; self-gated, respiration belt or pencil beam?
Cancer		
p009	Mignion	Imaging inhibition of the warburg effect by the EGFR inhibitor cetuximab in patient-derived Head & Neck xenografts
p010	Jansen	Feasibility of focal liver lesion classification based on dynamic contrast enhanced and T2-weighted MRI
p011	van Houdt	Delineation accuracy of prostate cancer for focal therapy: comparison of MR imaging and histopathology characteristics
p012	Dinkla	CT synthesis for MR-only brain radiotherapy treatment planning using convolutional neural networks
p013	Coa-Pham	Predictivity of the combined endogenous MR biomarkers on the change in tumor oxygenation modified by an allosteric effector of hemoglobin
p014	Hassan	Automated analysis of eye tumor MR-images for an improved treatment determination
p015	Rivera	Towards a virtual biopsy for hepatic cancers using phospholipid metabolism
p016	Beld	Validation study of high framerate source localization for MR-guided HDR brachytherapy
p017	Acciardo	Imaging markers of response to combined BRAF-MEK inhibition in melanoma
Cardiovascular		
p018	Holtackers	Clinical value of dark-blood late gadolinium enhancement without additional magnetization preparation
p019	Crombag	Microvasculature and intraplaque hemorrhage in atherosclerotic carotid lesions: an MR imaging study
p020	Vankerkom	MOLLI beats and MOLLI seconds used for native myocardial T1 mapping show an opposite heart rate dependency in phantoms
p021	Coolen	Double DANTE: an improved method for high-resolution intracranial vessel wall imaging
p022	van Hespen	Investigating the estimated intracranial wall thickness on MRI vessel wall images: what voxel size do we need?
p023	van Ooij	Pseudo Spiral Compressed Sensing for Aortic 4D flow MRI: A Comparison with k-t Principal Component Analysis

11:00 - 11:45 Authors of **odd** numbered posters must be available at their poster
15:45 - 16:30 Authors of **even** numbered posters must be available at their poster

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p025	Blanken	4D Flow Cardiac MRI Using Semi-Automated Retrospective Valve Tracking for Assessment of Severe Mitral Insufficiency
Diffusion		
p026	Baligand	Increasing Mixing Time in STEAM-DTI Enhances Inter-Muscle Heterogeneity Patterns in the Lower Leg of Healthy Subjects
p027	Keesman	A framework for b-value optimization in DWI
p028	Voskuilen	Generation of a muscle fibre orientation atlas of the in vivo tongue
p029	Liebrand	Angular versus spatial resolution in tractography for deep brain stimulation in psychiatry
p030	St-Jean	Effects of altering the noise distribution due to motion correction in diffusion MRI processing
p031	De Luca	Extension of the Richardson-Lucy spherical deconvolution to quantify multi-domain ODF and tensor metrics in the kidneys
p032	Mesri	Studying statistical power of Diffusion Kurtosis Imaging for group-wise Analysis
p033	Buikema	Simultaneous T2/diffusion estimation: do we need a diffusion time dependent diffusion model?
High Field		
p034	Khlebnikov	Multicolor metabolic quantitative CEST (mmqCEST) imaging: possibility and limitations
p035	Damen	Age dependency of T1 and T2 values in healthy pancreas measured at 7 Tesla
p036	Arteaga de Castro	CEST Feasibility in Rectal Cancer Patients at 7T for Detection of Residual Tumor
p037	Kemper	Parallel transmission kT-points and CAIPIRIHNA accelerated MP2RAGE for ultra-high field anatomical imaging
Musculoskeletal		
p038	Hooijmans	Multi-parametric MR shows increased T2 heterogeneity in fat infiltrated muscles in Becker Muscular Dystrophy
p039	Brinkhof	Depth dependence of diffusion in articular cartilage of the knee visualized at 7T
p040	Baur	Reducing scan time for full MRI examination of the ankle by 45% while maintaining diagnostic value using combined compressed sensing and parallel imaging
p041	Heskamp	Does muscular fat infiltration and volume determined with MRI correlate with functionality and the DMPK CTG repeat length in myotonic dystrophy type 1?
p042	Baron	Influence of fat saturation on 3D-UTE Cones T2* mapping of tendon tissue
Neuro		
p043	Bossoni	Assessment of different molecular iron forms in the brain tissue of Alzheimer patients
p044	Warnert	Assessing the heterogeneous physiology of non-enhancing human glioma with multi-parametric MRI
p045	Orije	In vivo DTI to correlate in 'real time' testosteron-induced neural changes to song performance in a seasonal songbird

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Poster Index

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p047	Anckaerts	Functional and structural deficits in a novel transgenic rat model of Alzheimer's Disease
p048	Hamaide	In vivo voxel-based morphometry study during the critical period of song learning in juvenile zebra finches
p049	Gahrmann	Growth patterns of non-enhancing glioma assessed on DTI-derived isotropic and anisotropic maps are not associated with IDH and 1p19q codeletion status
p050	Straathof	Distinct structure-function relationships at different hierarchical levels of structural connectivity in the rat brain
p051	Sleurs	Supratentorial reorganization after treatment for childhood infratentorial tumors from a graph theoretical perspective
p052	van Tilborg	Changes in corticospinal tract integrity in relation to recovery after cortical stroke as measured with DTI-based tractography in rat brain
p053	Naeyaert	Fully Automatic Segmentation Using an Improved Synthetic MRI Algorithm in a Neonatal Population
p054	van Vught	Rapid MR Imaging of Ocular Movement using Shared K-Space Data for Radiotherapy Planning
p055	Bos	Diffusion-prepared magnetic resonance neurography for the visualization of the Facial nerve
p056	Arts	Pulsatility and velocity in cerebral penetrating arteries in patients with carotid occlusive disease with 7T phase contrast: preliminary results
p057	Hinz	Multiscale multimodal imaging of the mouse cerebral vascular
p058	van der Kleij	Lower oxygenation in the peripheral subarachnoid space reflects decreased cerebral blood flow in dementia-related brain structures
p059	Sloots	Unraveling Cardiac and Respiratory Contributions to Brain Tissue Motion using Single Shot 2D DENSE at 7T MRI
p060	Geurts	Increased pulsatility in cerebral perforating arteries in patients with lacunar infarction or deep intracerebral hemorrhage, an explorative 7T MRI study
p061	Amiri	Inconsistency in Grey Matter Volume Estimation of MS Patients: A Multi-Vendor Study at 3 Tesla
p062	Vos	Can dMRI data be used to derive biomarkers to predict the response to TMS treatment for depression?
Perfusion		
p063	Bladt	Absolute CBF quantification in multi-time point ASL: the T1 issue
p064	Schmid	CO2-challenge measured with dual echo arterial spin labeling as a whole brain biomarker to assess the effect of amyloid deposition in HCHWA-D on the cerebrovascular reactivity
p065	van de Ven	Reproducibility and repeatability of 3D-GraSE and 2D-EPI ASL on 1.5T and 3T systems in healthy elderly
p066	van der Plas	Time-encoded golden angle radial ASL
p067	Franklin	The Influence of the cardiac cycle on velocity-selective and acceleration-selective Arterial Spin Labeling
p068	Vaclavu	Adaptations in cerebral physiology due to chronic anaemia measured with Turbo-QUASAR ASL
p069	Visser	Measuring the reproducibility of time-encoded pseudo-continuous arterial spin labeling with a perfusion phantom
p070	Hirschler	Background-suppression is more important for ASL at higher magnetic field strength

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Poster Index

Poster no.	First author	
Preclinical		
p071	Kara	Influence of surgical menopause on white matter integrity in a mouse model of Alzheimer's disease
p072	Braeckman	Characterisation of microstructural alterations in a weight drop mTBI rat model:a longitudinal diffusion MRI and histological analysis
p073	Krekorian	PLGA nanoparticles for 19F MRI and SPECT/PET applied to in vivo cell tracking
p074	Simonis	Quantification of pelvic organ prolapse in supine and upright position using MRI
p075	Kogelman	Increased T1Rho relaxation in a Duchenne muscular dystrophy mouse model with increased muscle fibrosis
p076	Suidgeest	Time-dependent diffusion and the random permeable barrier model predict muscle fiber dimensions in Duchenne muscular dystrophy mice
p077	Munting	Influence of Different Anesthesia Protocols on Cerebral Blood Flow and Cerebrovascular Reactivity measured with pseudo-Continuous Arterial Spin Labeling
Reconstruction and Post-processing		
p078	Schoormans	A novel iterative sparse deconvolution method for multicolor 19F-MRI
p079	Shcherbakova	The influence of B0 drift on the performance of the PLANET method and an algorithm for correction
p080	Navest	Noise navigator based motion detection and compensation
p081	Bruijnen	Gradient system characterization of a 1.5T MRI-Linac with application to UTE imaging
p082	van Ormondt	Concatenation of all data acquired by hyperpolarised 13C-MRS increases precision
p083	van Rijssel	High-resolution off-resonance maps improve conformity between distortion-corrected EPI acquisitions and distortion-free references
p084	van Gemert	Accelerating Compressed Sensing in Cartesian Parallel Imaging Reconstructions using an Efficient and Effective Circulant Preconditioner
p085	van den Noort	Automated time intensity curve shape and maximum enhancement analysis of dynamic contrast enhanced MRI for routine clinical diagnosis
p086	van der Heide	High-resolution in-vivo multi-parametric MRI using MR-STAT with limited-memory, parallel reconstruction algorithm
p087	Fuchs	A Fast and Dedicated First-Order Differencing EPT Reconstruction Method
p088	van Valenberg	High-dimensional and accurate dictionary fitting with B-spline interpolation and gradient-based optimization
p089	Ramos-Llordén	An educational presentation on accurate and precise MRI relaxometry: the often disregarded but critical role of statistical parameter estimation
p090	Chan	Strategies for multi-compartment modelling of the gradient recalled echo (GRE) signal in white matter - a simulation study
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RF Engineering		
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